

AMENDMENT OF THE CLAIMS:

Please amend claims 21-23, 26-31, 33, 35-43, 45-47, 50-55, 57, 59, 60 and 62-67 as follows:

Claims 1-20 (canceled)

Claim 21 (currently amended): A point of sale (POS) station for installation in a retail shopping environment, comprising:

a counter-surface installed in said retail shopping environment; and

a bar code reading system installed in said counter-surface, said bar code reading system including:

a bioptical laser scanning bar code reading unit having a bottom portion having a horizontal scanning window installable through said counter-surface, and a vertical portion operably connected with said bottom portion and having a vertical scanning window;

an electronic produce scale integrated within said bottom portion of said bioptical laser scanning bar code reading unit;

a housing connected to said vertical portion of said bioptical laser scanning bar code reading unit, defining a cashier's side of the system and a customer's side of the system;

a cashier-scale terminal integrated with said bioptical laser scanning bar code reading unit, and having a first visual display panel and a first keyboard provided on the cashier's side of said housing; and

a customer-kiosk terminal integrated with said bioptical laser scanning bar code reading unit, and having with a second visual display panel and second keyboard integrated therewith provided on the customer's side of said housing;

wherein the first display panel at said cashier-scale terminal enables the cashier to enter information into said cashier-scale terminal regarding produce items to be weighed by said electronic produce scale, as well as display such information for the cashier to review; and

wherein the second display panel at said customer-kiosk terminal enables the customer to view the ~~displayed~~ price of scanned items and the ~~displayed~~ weight and price of weighed items being displayed on said second display panel, as well as enter and display information pertaining

to financial transactions being carried out in connection with the purchase of products and/or produce at said POS ~~environment~~; environment; and

wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during POS transactions, while the customer is permitted to view the displayed price of scanned items and the displayed weight and price of weighted items.

Claim 22 (currently amended): The POS station of claim 21, wherein said electronic produce scale further comprises a produce weigh tray supported upon said bioptical laser scanning bar code reading unit and having a recessed surface region for slidably receiving the full weight of produce items under gravitational loading so that the full weight of the produce items to be purchased is accurately measured by said electronic produce scale integrated within the bottom portion of said bioptical laser scanning bar code reading unit.

Claim 23 (currently amended): The POS station of claim 21, wherein said customer-kiosk terminal is realized as a modular assembly connectable to said housing, and wherein said modular assembly comprises an ATM automated teller machine (ATM) submodule removably detached to a first installation port provided on said housing, and a phone submodule removably detached to a second installation port provided on said housing.

Claim 24 (previously presented): The POS station of claim 21, wherein the second display panel associated with said customer-kiosk terminal is provided with an Advertisement/Promotion Mode capable of displaying advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on said second display panel.

Claim 25 (previously presented): The POS station of claim 24, wherein said advertisements and promotions can relate to the products offered for sale in the kiosk-hosting retailer store, services and products offered for sale in local and/or regional markets, as well as community news, sporting events, recreational events as well as local educational programs.

Claim 26 (currently amended): The POS station of claim 21, wherein said bioptical laser scanning bar code reading unit comprises:

a plurality of ~~VLDs~~ visual laser diodes (VLDs), light focusing optics, scanning motors and scanning optics for producing and scanning laser scanning beams so as to project a laser scanning pattern through the horizontal and vertical scanning windows of the system, and scan bar codes on objects being moved thereby by the cashier, and light collection optics for collecting ~~the~~ and focusing the return laser light signal for subsequent photodetection;

a plurality of laser scan data generator and processing modules including a plurality of photodetectors, for producing scan data signals, that are ultimately decode-processed in order to produce symbol character data representative of the bar code symbol scanned by the system; and

a computing platform including a microprocessor, a memory architecture, a system bus architecture and an ~~I/O~~ input/output (I/O) interface connected to the system bus architecture for enabling the collection, processing and transport of data elements generated by the various components in the system.

Claim 27 (currently amended): The POS station of claim 26, wherein said computing platform has an operating system (OS), networking software to support the ~~TCP/IP protocol~~ transmission control protocol/internet protocol (TCP/IP), and Internet access software to access the ~~WWW~~ World Wide Web (WWW) and other information resources on ~~the Internet~~ a global information network.

Claim 28 (currently amended): The POS station of claim 27, wherein said first visual display panel is realized as a first ~~LCD~~ liquid crystal display (LCD) panel, said second display panel is realized as a second LCD panel, and second keyboard is realized as a touch-screen keypad mounted on said second LCD panel.

Claim 29 (currently amended): The POS station of claim ~~24~~ 26, wherein said customer-kiosk terminal further comprises a bar code symbol reader integrated with said computing platform.

Claim 30 (currently amended): The POS station of claim 26, wherein said customer-kiosk terminal comprises:

- a network interface controller (NIC) card operably connected to a system bus architecture, for enabling data packet communications over ~~an~~ a packet-switched information network; and

- a multi-port Ethernet hub device connected to said NIC card and said customer-kiosk terminal, so that said system has one or more Ethernet data ports for operable connection to said packet-switched network.

Claim 31 (currently amended): The POS station of claim 29, wherein said customer-kiosk terminal further comprises a voice-over-IP telephone handset integrated with said computing system, and having software components running thereon to support its voice communication functions over ~~the Internet~~ a global information network, or alternatively, over a Public Telecommunications Switching Network (PTSN).

Claim 32 (previously presented): The POS station of claim 21, wherein the vertical portion of said bioptical laser scanning bar code reading unit, said cashier-scale terminal, and said customer-kiosk terminal are contained in a housing of generally unitary construction.

Claim 33 (currently amended): A point of sale (POS) station for installation in a retail shopping environment, comprising:

- a counter-surface installed in said retail shopping environment; and

- a bar code reading system installed in said counter-surface, said bar code reading system including:

- a bioptical laser scanning bar code reading unit having a bottom portion having a horizontal scanning window, and a vertical portion operably connected with said bottom portion and having a vertical scanning window;

- an electronic produce scale integrated within said bottom portion of said bioptical laser scanning bar code reading unit;

- a housing connected to said vertical portion of said bioptical laser scanning bar code reading unit, defining a cashier's side of the system and a customer's side of the system;

a cashier-scale terminal integrated with said bioptical laser scanning bar code reading unit, and having a first visual display panel and a first keyboard provided on the cashier's side of said housing, and

customer-kiosk terminal integrated with said bioptical laser scanning bar code reading unit, and having with a second visual display panel and second keyboard integrated therewith provided on the cashier's side of said housing;

wherein the first display panel at said cashier-scale terminal enables the cashier to enter information into said cashier-scale terminal, regarding produce items to be weighed by said electronic produce scale, as well as display such information for the cashier to review;

wherein the second display panel at said customer-kiosk terminal enables the customer to view the ~~displayed~~ price of scanned products and the ~~displayed~~ weight and price of weighed items being displayed on said second display panel, as well as enter and display information pertaining to financial transactions being carried out in connection with the purchase of products and/or produce at said POS environment; and

wherein the second visual display panel is also provided with an Advertisement/Promotion Mode enabling the display of advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on said second visual display ~~terminal~~; terminal; and

wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during POS transactions, while the customer is permitted to view the displayed price of scanned items and the displayed weight and price of weighted items.

Claim 34 (previously presented): The POS station of claim 33, wherein said advertisements and promotions relate to items selected from the group consisting of: products offered for sale in the kiosk-hosting retailer's store; services and products offered for sale in local and/or regional markets; community news; sporting events; recreational events; and local educational programs and events.

Claim 35 (currently amended): The POS station of claim 21, wherein said electronic produce scale further comprises a produce weigh tray supported upon said bioptical laser scanning bar code reading unit and having a recessed surface region for slidably receiving the full weight of produce items under gravitational loading so that the full weight of the produce items to be purchased is accurately measured by said electronic produce scale integrated within the bottom portion of said bioptical laser scanning bar code reading unit.

Claim 36 (currently amended): The POS station of claim 33, wherein said customer-kiosk terminal is realized as a modular assembly connectable to said housing, and wherein said modular assembly comprises an ATM automated teller machine (ATM) submodule removably detached to a first installation port provided on said modular assembly, and a phone submodule removably detached to a second installation port provided on said modular assembly.

Claim 37 (currently amended): The POS station of claim 33, wherein ~~said~~ advertisements and promotions can relate to the products offered for sale in the kiosk-hosting retailer store, services and products offered for sale in local and/or regional markets, as well as community news, sporting events, recreational events as well as local educational programs.

Claim 38 (currently amended): The POS station of claim 33, wherein said bioptical laser scanning bar code reading unit comprises:

- a plurality of ~~VLDs~~ visual laser diodes (VLDs), light focusing optics, scanning motors and scanning optics for producing and scanning laser scanning beams so as to project a laser scanning pattern through the horizontal and vertical scanning windows of the system, and scan bar codes on objects being moved thereby by the cashier, and light collection optics for collecting ~~the~~ and focusing the return laser light signal for subsequent photodetection;

- a plurality of laser scan data generator and processing modules including a plurality of photodetectors, for producing scan data signals, that are ultimately decode-processed in order to produce symbol character data representative of the bar code symbol scanned by the system; and

- a computing platform including a microprocessor, a memory architecture, a system bus architecture and an ~~I/O~~ input/output (I/O) interface connected to the system bus architecture for

enabling the collection, processing and transport of data elements generated by the various components in the system.

Claim 39 (currently amended): The POS station of claim 33 38, wherein said computing platform comprises an operating system (OS), networking software to support the ~~TCP/IP~~ transmission control protocol (TCP/IP), and Internet access software to access the ~~WWW~~ World Wide Web (WWW) and other information resources on ~~the Internet~~ a global information network.

Claim 40 (currently amended): The POS station of claim 33, wherein said first visual display panel is realized as a first ~~LCD~~ liquid crystal display (LCD) panel, said second display panel is realized as a second LCD panel, and second keyboard is realized as a touch-screen keypad mounted on said second LCD panel.

Claim 41 (currently amended): The POS station of claim 33 38, wherein said customer-kiosk terminal further comprises a bar code symbol reader integrated with said computing platform.

Claim 42 (currently amended): The POS station of claim 38, wherein said customer-kiosk terminal comprises:

- a network interface controller (NIC) card operably connected to the system bus architecture, for enabling data packet communications over ~~an~~ a packet-switched information network; and

- a multi-port Ethernet hub device connected to said NIC card and said customer-kiosk terminal, so that said system has one or more Ethernet data ports for operable connection to said packet-switched information network.

Claim 43 (currently amended): The POS station of claim 29, wherein said customer-kiosk terminal further comprises a telephone handset integrated with said computing platform, and having software components running thereon to support its voice communication functions over ~~the Internet~~ a global information network, or alternatively, over a Public Telecommunications Switching Network (PTSN).

Claim 44 (previously presented): The POS station of claim 21, wherein the vertical portion of said bioptical laser scanning bar code reading unit, said cashier-scale terminal, and said customer-kiosk terminal are contained in a housing of generally unitary construction.

Claim 45 (currently amended): A point of sale (POS) station for installation in a retail shopping environment, comprising:

a counter-surface installed in said retail shopping environment; and

a bar code reading system installed in said counter-surface, said bar code reading system including:

a bioptical laser scanning bar code reading unit having a bottom portion having a horizontal scanning window installable through said counter-surface, and a vertical portion operably connected with said bottom portion and having a vertical scanning window;

an electronic produce scale integrated within said bottom portion of said bioptical laser scanning bar code reading unit;

a housing connected to said vertical portion of said bioptical laser scanning bar code reading unit, defining a cashier's side of the system and a customer's side of the system;

a cashier-scale terminal integrated with said bioptical laser scanning bar code reading unit, and having a first visual display panel and a first keyboard provided on the cashier's side of said housing; and

a customer-kiosk terminal integrated with said bioptical laser scanning bar code reading unit, and having with a second visual display panel and second keyboard integrated therewith provided on the customer's side of said housing;

wherein the first display panel at said cashier-scale terminal enables the cashier to enter information into said cashier-scale terminal regarding produce items to be weighed by said electronic produce scale, as well as display such information for the cashier to review; and

wherein the second display panel at said customer-kiosk terminal enables the customer to view the ~~displayed~~ price of scanned items and the ~~displayed~~ weight and price of weighed items being displayed on said second display panel, as well as enter and display information pertaining to financial transactions being carried out in connection with the purchase of products and/or produce at said POS ~~environment~~. environment; and



wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during POS transactions, while the customer is permitted to view the displayed price of scanned items and the displayed weight and price of weighted items.

Claim 46 (currently amended): The POS station of claim 45, wherein said electronic produce scale further comprises a produce weigh tray supported upon said bioptical laser scanning bar code reading unit and having a recessed surface region for slidably receiving the full weight of produce items under gravitational loading so that the full weight of the produce items to be purchased is accurately measured by said electronic produce scale integrated within the bottom portion of said bioptical laser scanning bar code reading unit.

Claim 47 (currently amended): The POS station of claim 45, wherein said customer-kiosk terminal is realized as a modular assembly connectable to said housing, and wherein said modular assembly comprises an ATM automated teller machine (ATM) submodule removably detached to a first installation port provided on said housing, and a phone submodule removably detached to a second installation port provided on said housing.

Claim 48 (previously presented): The POS station of claim 45, wherein the second display panel associated with said customer-kiosk terminal is provided with an Advertisement/Promotion Mode capable of displaying advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on said second display panel.

Claim 49 (previously presented): The POS station of claim 48, wherein said advertisements and promotions can relate to the products offered for sale in the kiosk-hosting retailer store, services and products offered for sale in local and/or regional markets, as well as community news, sporting events, recreational events as well as local educational programs.

Claim 50 (currently amended): The POS station of claim 45, wherein said bioptical laser scanning bar code reading unit comprises:

a plurality of ~~VLDs~~ visual laser diodes (VLDs), light focusing optics, scanning motors and scanning optics for producing and scanning laser scanning beams so as to project a laser scanning pattern through the horizontal and vertical scanning windows of the system, and scan bar codes on objects being moved thereby by the cashier, and light collection optics for collecting the and focusing the return laser light signal for subsequent photodetection;

a plurality of laser scan data generator and processing modules including a plurality of photodetectors, for producing scan data signals, that are ultimately decode-processed in order to produce symbol character data representative of the bar code symbol scanned by the system; and

a computing platform including a microprocessor, a memory architecture, a system bus architecture and an ~~I/O~~ input/output (I/O) interface connected to the system bus architecture for enabling the collection, processing and transport of data elements generated by the various components in the system.

Claim 51 (currently amended): The POS station of claim 50, wherein said computing platform has an operating system (OS), networking software to support the ~~TCP/IP protocol~~ transmission control protocol/internet protocol (TCP/IP), and Internet access software to access the ~~WWW~~ World Wide Web (WWW) and other information resources on ~~the Internet~~ a global information network.

Claim 52 (currently amended): The POS station of claim 51, wherein said first visual display panel is realized as a first ~~LCD~~ liquid crystal display (LCD) panel, said second display panel is realized as a second LCD panel, and second keyboard is realized as a touch-screen keypad mounted on said second LCD panel.

Claim 53 (currently amended): The POS station of claim ~~45~~ 50, wherein said customer-kiosk terminal further comprises a bar code symbol reader integrated with said computing platform.

Claim 54 (currently amended): The POS station of claim 50, wherein said customer-kiosk terminal comprises:

a network interface controller (NIC) card operably connected to a system bus architecture, for enabling data packet communications over ~~an~~ a packet-switched information network; and

a multi-port Ethernet hub device connected to said NIC card and said customer-kiosk terminal, so that said system has one or more Ethernet data ports for operable connection to said packet-switched network.

Claim 55 (currently amended): The POS station of claim 53, wherein said customer-kiosk terminal further comprises a voice-over-IP telephone handset integrated with said computing system, and having software components running thereon to support its voice communication functions over ~~the Internet~~ a global information network, or alternatively, over a Public Telecommunications Switching Network (PTSN).

Claim 56 (previously presented): The POS station of claim 45, wherein the vertical portion of said bioptical laser scanning bar code reading unit, said cashier-scale terminal, and said customer-kiosk terminal are contained in a housing of generally unitary construction.

Claim 57 (currently amended): A point of sale (POS) station for installation in a retail shopping environment, comprising:

a counter-surface installed in said retail shopping environment; and

a bar code reading system installed in said counter-surface, said bar code reading system including:

a laser scanning bar code reading unit having a bottom portion having a horizontal scanning window;

an electronic produce scale integrated within said bottom portion of said laser scanning bar code reading unit;

a housing connected to said bottom portion of said laser scanning bar code reading unit, defining a cashier's side of the system and a customer's side of the system;

a cashier-scale terminal integrated with said laser scanning bar code reading unit, and having a first visual display panel and a first keyboard provided on the cashier's side of said housing, and

customer-kiosk terminal integrated with said bioptical laser scanning bar code reading unit, and having with a second visual display panel and second keyboard integrated therewith provided on the cashier's side of said housing;

wherein the first display panel at said cashier-scale terminal enables the cashier to (1) enter information into said cashier-scale terminal, regarding produce items to be weighed by said electronic produce scale, as well as (2) display such information for the cashier to review;

wherein the second display panel at said customer-kiosk terminal enables the customer to (1) view the ~~displayed~~ price of scanned products and the ~~displayed~~ weight and price of weighed items being displayed on said second display panel, as well as (2) enter and display information pertaining to financial transactions being carried out in connection with the purchase of products and/or produce at said POS environment; and

wherein the second visual display panel is also provided with an Advertisement/Promotion Mode enabling the display of advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on said second visual display ~~terminal~~; terminal; and

wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during POS transactions, while the customer is permitted to view the displayed price of scanned items and the displayed weight and price of weighted items.

Claim 58 (previously presented): The POS station of claim 56, wherein said advertisements and promotions relate to items selected from the group consisting of: products offered for sale in the kiosk-hosting retailer's store; services and products offered for sale in local and/or regional markets; community news; sporting events; recreational events; and local educational programs and events.

Claim 59 (currently amended): The POS station of claim 45, wherein said electronic produce scale further comprises a produce weigh tray supported upon said laser scanning bar code reading unit and having a recessed surface region for slidably receiving the full weight of produce items under gravitational loading so that the full weight of the produce items to be

purchased is accurately measured by said electronic produce scale integrated within the bottom portion of said laser scanning bar code reading unit.

Claim 60 (currently amended): The POS station of claim 57, wherein said customer-kiosk terminal is realized as a modular assembly connectable to said housing, and wherein said modular assembly comprises an ATM automated teller machine (ATM) submodule removably detached to a first installation port provided on said modular assembly, and a phone submodule removably detached to a second installation port provided on said modular assembly.

Claim 61 (previously presented): The POS station of claim 57, wherein said advertisements and promotions can relate to the products offered for sale in the kiosk-hosting retailer store, services and products offered for sale in local and/or regional markets, as well as community news, sporting events, recreational events as well as local educational programs.

Claim 62 (currently amended): The POS station of claim 57, wherein said bioptical laser scanning bar code reading unit comprises:

- a laser beam scanning mechanism for producing and scanning laser scanning beams so as to project a laser scanning pattern through the horizontal scanning window of the system, and scan bar codes on objects being moved thereby by the cashier, and light collection optics for collecting ~~the~~ and focusing the return laser light signal for subsequent photodetection;

- a scan data signal generating and processing module including at least one photodetector, for producing a scan data signal, that is decode-processed in order to produce symbol character data representative of the bar code symbol scanned by the system; and

- a computing platform including a microprocessor, a memory architecture, a system bus architecture and an ~~I/O~~ input/output (I/O) interface connected to the system bus architecture for enabling the collection, processing and transport of data elements generated by the various components in the system.

Claim 63 (currently amended): The POS station of claim 57, wherein ~~said~~ a computing platform comprises an operating system (OS), networking software to support the ~~TCP/IP-protocol~~ transmission control protocol/internet protocol (TCP/IP), and Internet access software to access

the ~~WWW~~ World Wide Web (WWW) and other information resources on ~~the Internet~~ a global information network.

Claim 64 (currently amended): The POS station of claim 57, wherein said first visual display panel is realized as a first ~~LCD~~ liquid crystal display (LCD) panel, said second display panel is realized as a second LCD panel, and second keyboard is realized as a touch-screen keypad mounted on said second LCD panel.

Claim 65 (currently amended): The POS station of claim 57, wherein said customer-kiosk terminal further comprises a bar code symbol reader integrated with ~~said~~ a computing platform.

Claim 66 (currently amended): The POS station of claim 62, wherein said customer-kiosk terminal comprises:

- a network interface controller (NIC) card operably connected to the system bus architecture, for enabling data packet communications over ~~an~~ a packet-switched information network; and

- a multi-port Ethernet hub device connected to said NIC card and said customer-kiosk terminal, so that said system has one or more Ethernet data ports for operable connection to said packet-switched information network.

Claim 67 (currently amended): The POS station of claim 53, wherein said customer-kiosk terminal further comprises a telephone handset integrated with said computing platform, and having software components running thereon to support its voice communication functions over ~~the Internet~~ a global information network, or alternatively, over a Public Telecommunications Switching Network (PTSN).

Claim 68 (previously presented): The POS station of claim 45, wherein the vertical portion of said bioptical laser scanning bar code reading unit, said cashier-scale terminal, and said customer-kiosk terminal are contained in a housing of generally unitary construction.